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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,222	07/12/2004	Jorge Costa Claver	70.1097	3782

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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

KENNEDY, JOSHUA T

ART UNIT PAPER NUMBER

3679

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/501,222	COSTA CLAVER, JORGE	
	Examiner	Art Unit	
	Joshua T. Kennedy	3679	<i>JTC</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claims 14-26 have been examined.

Claim Objections

Claim 14 is objected to because of the following informalities:

In line 1 of the claim, "according" should be removed. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Sorenson (US Patent 3,554,585).

As to Claim 14. Sorenson discloses a coupling device for joining a first body (20) with a second body (18) along a joint plane, comprising a projection (Fig 3; Examiner considers the portion of the piston with the largest diameter formed between the shoulder 62 and tapered portions 66 to be the projection) integral with said first body,

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and a cavity (Fig 3; Examiner considers the cavity to be the interior of the tubular portion 18) integral with said second body, wherein said projection has a first alignment surface (66) and said cavity has an alignment member (56) which forces said alignment surface to move towards an alignment point defined in said joint plane, wherein said alignment surface attains said alignment point (Col 3 Lines 6-11; Examiner considers the alignment point to occur when the alignment member snaps fits with the shoulder 62).

As to Claim 15. Sorenson discloses said alignment surface having one of a point of minimum height (64; Examiner considers the minimum diameter of the piston at 64 to be the minimum height), with respect to said joint plane, which coincides with said alignment point, and which is on the same vertical, with respect to said joint plane, as said alignment point.

As to Claim 16. Sorenson discloses said alignment surface defines at least two lines of maximum inclination which meet at said alignment point (62,64).

As to Claims 17-19, and 21. Sorenson discloses said projection snap fitting in a first snap fit position and a second alignment position in said cavity such that said projection is introduced in said cavity by overcoming a certain entrance resistance, but not being extracted from said cavity without overcoming a certain exit resistance (Col 3 Lines 6-11; Examiner considers the "snap fit" to occur when the alignment member snaps beyond the maximum diameter (First snap fit position) of the piston and sits along

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surface 64 adjacent to the shoulder 62 (second snap fit position)); wherein said snap fit is reversible (Col 3, Lines 31-40).

As to Claim 20. Sorenson discloses said alignment member including a head (56), threaded body (48), and a spring (58).

As to Claim 22. Sorenson discloses a second alignment surface (Fig. 4; where tapered end 38 meets the minimum diameter at 64) arranged symmetrically, with respect to the joint plane, to the first alignment surface.

As to Claim 23. Sorenson discloses said projection having an included surface on an exterior perimeter thereof, which facilitates introduction into the cavity (Fig 3; Examiner considers the minimum diameter at the terminal end of the piston to facilitate the introduction because of its reduced diameter in comparison to the diameter of the hollow tubing).

As to Claim 24. Sorenson discloses said alignment surface being a surface selected from pyramid, pyramid frustum, cone and cone frustum surfaces and partial surfaces thereof (Examiner considers the tapered portion 66 to be a partial surface of a pyramid).

As to Claim 26. Sorenson discloses the spring being completely housed in a second cavity formed between the head and the threaded body (Fig 4).

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sorenson as applied to claims 14-24 and 26 above, and further in view of Crain (US Patent 4,385,849).

As to Claim 25. Sorenson, as advanced above, discloses the connecting device significantly as described but does not disclose the head having a shoulder, which engages a stop of the second body such that movement biased by the spring is limited.

Crain teaches a similar pin on a connecting device “formed for engagement with an internal shoulder 35 in the plug bore for restricting the outward movement of the pin” (Col 3, Lines 21-24). It would have been obvious to one of ordinary skill in the art to include a pin and internal shoulder as taught by Crain on the connection of Rager because the pin of Crain restricts the movement of the pin to remain within a second cavity, not allowing it to be removed from the cavity nor lose contact with the spring.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USPN 6,006,447 to Neal cited to show a similar coupling device having a conical alignment member biased by a spring.

USPN 4,042,305 to Vincent cited to show a similar coupling device having a conical alignment member biased by a spring.

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USPN 6,379,072 to Brown et al cited to show alignment projection having an angled alignment member.

USPN 4,378,819 to Macho cited to show a similar coupling device having a conical alignment member biased by a spring.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua T. Kennedy whose telephone number is (571) 272-8297. The examiner can normally be reached on M-F: 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JTK
9/28/05

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3800